

WE CLAIM:

1. A method of treatment of a host with a cellular proliferative disease, comprising contacting said host with a hexitol and an antiproliferative agent, each in an amount sufficient to modulate said cellular proliferative disease.

2. The method according to claim 1, wherein said hexitol comprises dianhydrogalactitol (Dianhydrodulcitol; Dulcitol diepoxide; DAD; DAG; 5,6-Diepoxydulcitol; 1,2:5,6-Dianhydrodulcitol; 1,2:5,6-Dianhydrogalactitol; 1,2:5,6-Diepoxydulcitol).

3. The method according to claim 1, wherein said hexitol comprises a dianhydrogalactitol analog.

4. The method according to claim 1 wherein said antiproliferative agent comprises an agent that interacts with nucleic acids.

5. The method according to claim 1 wherein said antiproliferative agent comprises an alkylating agent, an intercalating agent, a metal coordination complex, a pyrimidine nucleoside, a purine, an inhibitor of nucleic acid associated enzymes, or an inhibitor of nucleic acid associated proteins.

6. The method according to claim 1 wherein said antiproliferative comprises cisplatin.

7. A method according to claim 1 wherein said hexitol is administered before the administration of said antiproliferative agent.

8. A method according to claim 1 when said hexitol is administered during the administration of said antiproliferative agent.

9. A method according to claim 1 wherein said hexitol is administered after the administration of said antiproliferative agent.

5 10. The method of claim 1 wherein the modulation of said disease with said composition is greater than that for said antiproliferative agent alone.

11. A composition comprising a hexitol and an antiproliferative agent.

12. The composition of claim 11 wherein said hexitol comprises dianhydrogalactitol.

13. Use of a dianhydrogalactitol and an antiproliferative agent in the formulation of a medicament for the treatment of a cellular proliferative disease.